



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/685,899	10/15/2003	Sandeep Kulkarni	57349 D1 (CSP-025549-V1)	6249
1726 7590 08/05/2008 INTERNATIONAL PAPER COMPANY 6285 TRI-RIDGE BOULEVARD LOVELAND, OH 45140				
EXAMINER CAMERON, ERMA C				
ART UNIT 1792		PAPER NUMBER		
MAIL DATE 08/05/2008		DELIVERY MODE PAPER		

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/685,899

Applicant(s)

KULKARNI ET AL.

Examiner

/Erma Cameron/

Art Unit

1792

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 1 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 11 July 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 27-35, 37-39 and 53-65 is/are pending in the application.
- 4a) Of the above claim(s) 31, 32, 34 and 64 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 27-30, 33, 35, 37-39, 53-63, 65 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Response to Amendment

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 54 and 63 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

a) Claims 54 and 63: “long term” is vague in that long is not defined.

b) Claim 54: it is not clear if “long term” modifies only durability or both durability and resistance.

3. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Art Unit: 1792

4. Claims 29, 30 and 58 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

Claims 29 and 30: the subject matter of these two claims is new matter that was not in the specification or claims as filed.

Claim 58: the subject matter of claim 58 was not in the specification or claims as filed.

The applicant is requested to cancel all new matter.

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. The rejection of Claims 27-30, 37, 39, 53, 54, 56-59 and 63 under 35 U.S.C. 102(b) as being clearly anticipated by WO 99/63157 is withdrawn because of the amendment filed 7/11/2008.

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. The rejection of Claims 33, 38, 55 and 65 under 35 U.S.C. 103(a) as being unpatentable over WO 99/63157 is withdrawn because of the amendment filed 7/11/2008.

9. Claims 27-30, 33, 35, 37-39, 53-59, 63 and 65 are rejected under 35 U.S.C. 103(a) as being unpatentable over WO 99/63157 taken in view of Malhotra (5709976).

'157 teaches a paper or paperboard with a basis weight such as 200 g/m² (= 123 lb/ 3000 square feet) (3:7-26) and a basecoat of starch or other materials, with an ink-receptive layer on top that comprises acrylic polymers and additives such as polyvinyl alcohol (6:24-9:23). The improved durability, resistance to staining and storageability are inherent to the coatings.

'157 fails to teach that the ink receiving layer has a biocide.

'976 teaches a coated paper with a barrier layer and an ink receiving layer over the barrier layer that comprise a biocide, as well as acrylic emulsions (see Abstract; 6:61-65; 12:1-6; 23:9-24:25).

It would have been obvious one of ordinary skill in the art to have added the biocide of the '976 ink receiving layer into the '157 paper because of the teaching of '976 that such a biocide is conventional in an acrylic containing ink receiving layer.

'157 does not teach the water absorption range, but because the coatings are similar to those claimed by applicant, the water absorption range of the '157 paper or paperboard are expected to overlap with that claimed by applicant.

The ink receptive layer is 0.5-10 g/m² (0.37-6.1 lb per 3000 sf) (4:13-22) which overlaps with the coat weight claimed by applicant.

Response to Arguments

The applicant has argued that the hydrophobic barrier layer of Malhotra '976 is not starch and is not identical to the claimed holdout layer. The examiner's position is that '976 is used for the teaching of a biocide in an ink receiving layer over a barrier layer and not for starch as the barrier or holdout layer. The applicant also argues that the paper of '976 is a low basis weight paper, unlike that claimed by applicant. Again, it is the examiner's position that '976 is used for its teaching of biocide in an ink receiving layer and not for paper weight.

Claim Rejections - 35 USC § 103

10. Claims 27-30, 33, 35, 37-39, 53-59, 63 and 65 rejected under 35 U.S.C. 103(a) as being unpatentable over Bailey et al (5885340).

'340 teaches a printable paper or paperboard coated with a first layer that comprises starch, and a second layer that comprises acrylic latex, biocide and other additives (see Abstract;

1:14-41; 2''18-56; 3:35-5:29; see Examples). Because the paper material may be a paperboard, it appears to meet the basis weight limitations.

'340 does not teach the water absorption range, but because the coatings are similar to those claimed by applicant, the water absorption range of the '340 paper or paperboard are expected to overlap with that claimed by applicant.

11. Claims 27-30, 33, 35, 37-39, 53-59, 63 and 65 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ogawa (5472757).

'757 teaches a printable paper that has an ink receiving layer 1 that comprises pigment, binder such as polyvinyl alcohol, slimeicide (i.e. a biocide), silica etc (4:6-5:50), a barrier layer (2 or 4) below the ink receiving layer and/or below the paper layer and which comprises starch (3:5-26)

'757 does not teach the water absorption range, but because the coatings are similar to those claimed by applicant, the water absorption range of the '757 paper or paperboard are expected to overlap with that claimed by applicant.

12. Claims 60-62 are rejected under 35 U.S.C. 103(a) as being unpatentable over [WO 99/63157 taken in view of Malhotra (5709976)], or Bailey et al (5885340) or Ogawa (5472757), all further taken in view of EP 880892.

'157, '976, 340 and '757 are all applied here for the reasons given above.

None of these reference teach the biocides of claims 60-62.

'892 teaches that 3-iodo-2 propynyl butyl carbamate (4:25) is a microbiocide that may be used in paper coatings (5:8-19).

It would have been obvious to one of ordinary skill in the art to have substituted the biocide of '976 or '340 or '757 with the carbamate biocide of '892 with the expectation of success in controlling bacterial growth because of the teaching of '892 that 3-iodo-2-propynyl butyl carbamate is a successful biocide for paper.

Conclusion

13. Any inquiry concerning this communication or earlier communications from the examiner should be directed to /Erma Cameron/ whose telephone number is 571-272-1416. The examiner can normally be reached on 8:30-6:00, alternate Fridays off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Timothy Meeks can be reached on 571-272-1423. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Erma Cameron/
Primary Examiner
Art Unit 1792

August 1, 2008